Claims

What is claimed is:

1. A process for preparing trinitrololuene (TNT) comprising the steps of:

   (a) treating toluene with nitric acid to produce dinitrotoluene (DNT); and

   (b) then treating the DNT formed in step (b) with nitric acid and trifluoromethanesulfonic acid to produce the TNT.

2. The process of claim 1 wherein in step (a) the nitric acid has a concentration of from about 90% to about 99% by weight.

3. The process of claim 2 wherein in step (a) the nitric acid has a concentration of from about 98% to about 99% by weight.

4. The process of claim 1 wherein step (a) is carried out at a temperature of less than about 60°C.

5. The process of claim 4 wherein step (a) is carried out at a temperature of less than about 30°C.

6. The process of claim 1 wherein in step (a) the DNT is produced at a purity greater than about 98% by weight.

7. The process of claim 6 wherein in step (a) the DNT is produced at purity of greater than about 99% by weight.

8. The process of claim 1 wherein in step (b) the nitric acid has a concentration of from about 98% to about 99% by weight.

9. The process of claim 1 wherein in step (b) the TNT is produced at a purity greater than about 98% by weight.

10. The process of claim 9 wherein in step (b) the TNT is produced at a purity greater than about 99% by weight.

11. A process for preparing trinitrololuene (TNT) comprising the steps of:

(a) treating toluene with nitric acid having a concentration of from about 90% to about 99% by weight at a temperature of less than about 60°C to produce dinitrotoluene (DNT); and

(b) then treating the DNT formed in step (b) with nitric acid having a concentration of from about 98% to about 99% by weight and trifluoromethanesulfonic acid to produce TNT.

12. The process of claim 11 wherein in step (a) the nitric acid has a concentration of from about 98% to about 99% by weight.

13. The process of claim 11 wherein step (a) is carried out at a temperature of less than about 30° C.

14. The process of claim 11 wherein in step (a) the DNT is produced at a purity of greater than about 98% by weight.

15. The process of claim 14 wherein in step (a) the DNT is produced at a purity of greater than about 99% by weight.

16. The process of claim 11 wherein in step (b) the TNT is produced at a purity greater than about 98% by weight.

17. The process of claim 16 in step (b) wherein the TNT is produced at a purity greater than about 99% by weight.

18. A process for preparing trinitrotoluene (TNT) comprising the step of treating dinitrotoluene with nitric acid having and trifluoromethanesulfonic acid to produce the TNT.

19. The process of claim 18 wherein the nitric acid is at a concentration of from about 98% to about 99% by weight.

20. The process of claim 18 wherein the TNT is produced at a purity greater than about 98% by weight

21. The process of claim 20 wherein the TNT is produced at a purity greater than about 99% by weight.